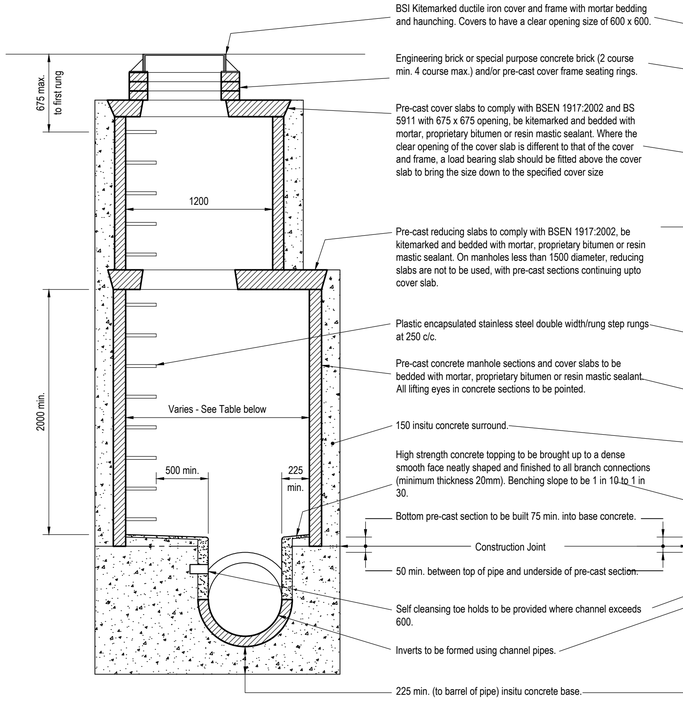
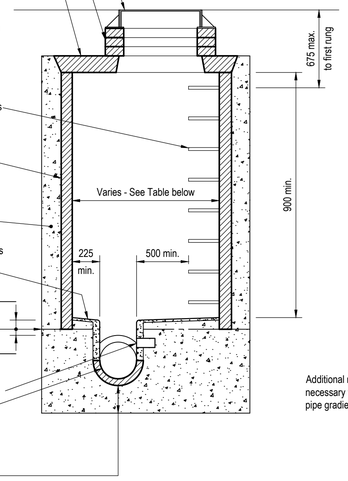
TYPE A MANHOLE TYPICAL DETAILS
Depth to soffit 3m to 6m

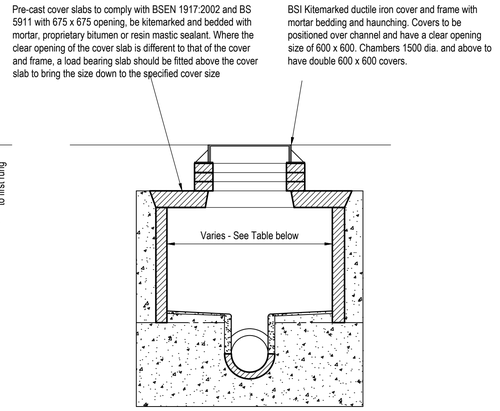


TYPE B MANHOLE TYPICAL DETAILS
Depth to soffit 1.5m to 3m

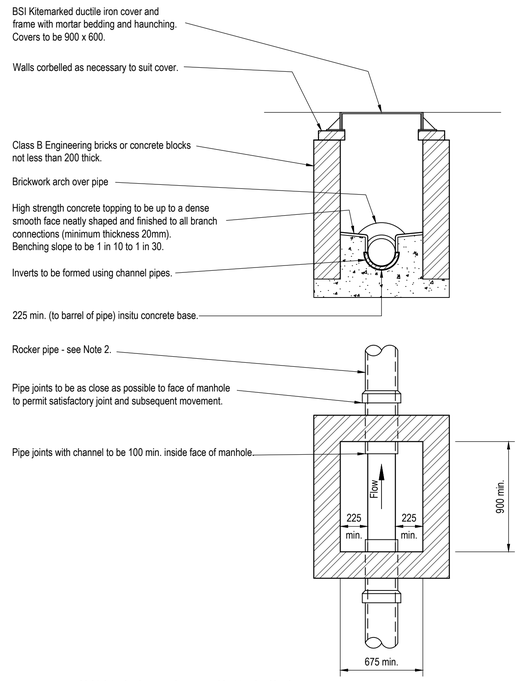


TYPE B1 MANHOLE TYPICAL DETAILS
Depth to soffit 1m to 1.5m

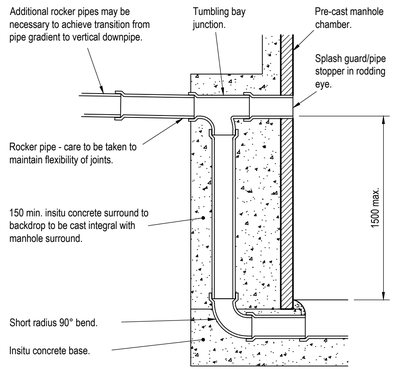
CONSTRUCTION NOTES AS TYPE B MANHOLE EXCEPT STEP RUNGS NOT REQUIRED



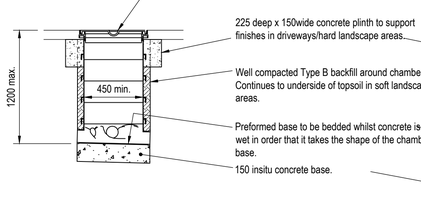
TYPE D MANHOLE TYPICAL DETAILS
Depth to soffit less than 1m



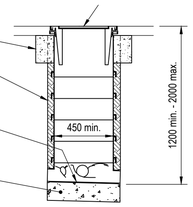
Additional rocker pipes may be necessary to achieve transition from pipe gradient to vertical downpipe.



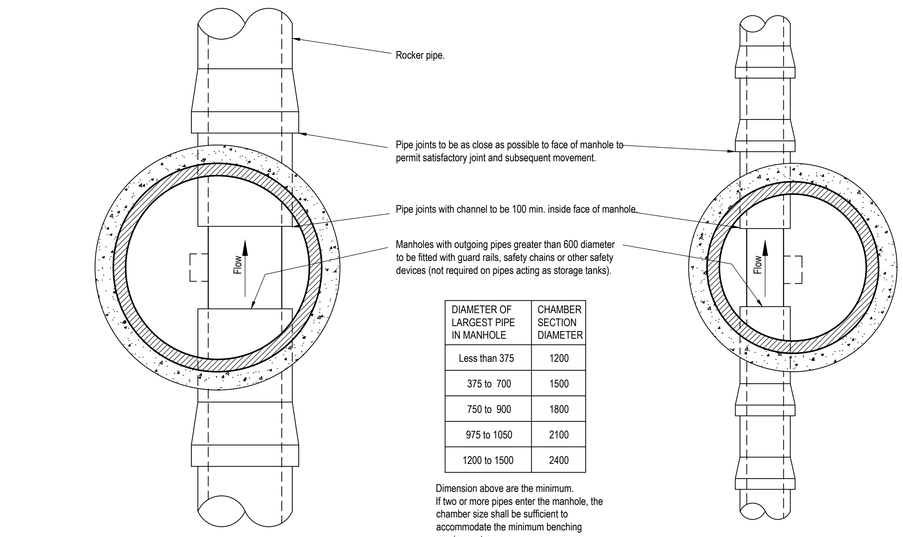
TYPICAL BACKDROP DETAIL



INSPECTION CHAMBER

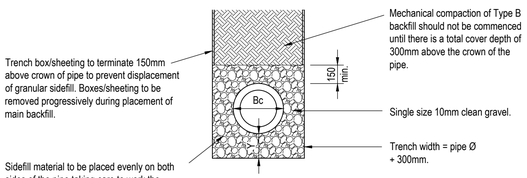


REDUCED ACCESS INSPECTION CHAMBER

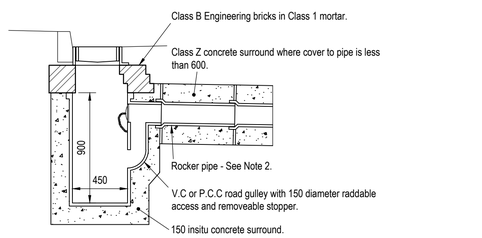


DIAMETER OF LARGEST PIPE IN MANHOLE	CHAMBER SECTION DIAMETER
Less than 375	1200
375 to 700	1500
750 to 900	1800
975 to 1050	2100
1200 to 1500	2400

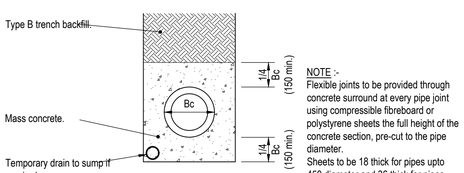
Dimension above are the minimum.
If two or more pipes enter the manhole, the chamber size shall be sufficient to accommodate the minimum benching requirements.



CLASS S BED AND SURROUND PVC PIPES



TYPICAL GULLY DETAIL



NOTE :-
Flexible joints to be provided through concrete surround at every pipe joint using compressible fibreboard or polystyrene sheets the full height of the concrete section, pre-cut to the pipe diameter.
Sheets to be 18 thick for pipes upto 450 diameter and 36 thick for pipes over 450 diameter.

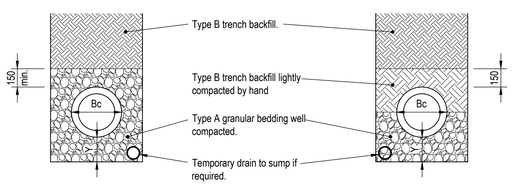
CLASS Z BED AND SURROUND

PIPE BED AND SURROUND DIMENSIONS

Bc = Outside Diameter of Pipe

IN UNIFORM SOILS
DIMENSION Y = 150 or 1/6Bc (whichever is the greater) under barrels and not less than 100 under sockets.

IN ROCK OR MATERIAL CONTAINING HARD SPOTS
DIMENSION Y = 200 or 1/4Bc (whichever is the greater) under barrels and not less than 200 under sockets.



CLASS S BED AND SURROUND

CLASS B BED AND SURROUND

TYPICAL PIPE BED AND SURROUND DETAILS

TYPE A GRANULAR MATERIAL

All granular material to be single sized or graded in accordance with the following table :-

NOMINAL PIPE BORE	SIZE	
	SINGLE SIZE	GRADED
100-125	10	-
150-200	10 or 14	14 to 5
225-300	10,14 or 20	14 to 5 or 20 to 5
375-500	14 or 20	14 to 5 or 20 to 5
Over 500	14,20 or 40	14 to 5, 20 to 5 or 40 to 5

TYPE B MATERIAL

In Public Highways and other hardstanding areas as may be noted on the scheme drawings, the material referred to as Type B is to be D.O.T Type 1 granular material to Clause 803 of the Specification For Highway Works, subject to the approval of the adopting Highway Authority.

Elsewhere, Type B selected material, whether imported or locally excavated, shall consist of uniform, readily compactable material, free from vegetable matter, building rubbish, frozen material and material susceptible to spontaneous combustion. Clay with a Liquid Limit greater than 80 and/or a Plastic Limit greater than 55 is to be excluded. Clay lumps and stones retained on 75 and 37 sieves respectively and all material with an excessively high moisture content to be excluded.

INFORMATION WITHIN THIS DRAWING IS NOT NECESSARILY PRODUCED TO SCALE. ALWAYS USE FIGURED DIMENSIONS AND CO-ORDINATES - IF IN DOUBT, ASK.

NOTES

1. All pipes are to be laid soffit to soffit at manholes unless noted otherwise.
2. Manhole covers shall have a clear opening of 600 x 600 and shall be class D400 to BS EN124 with 150 deep frames in highways. Covers to have closed keyways and are to be bedded on steel shims with 1:3 mortar haunching. Covers to be stamped BS EN124, carry BSI Certification Trade Mark (The Kitemark) and the maufacturer's name.
3. Pipes entering manholes and road gullies shall have a flexible joint within 600 of the inside of the manhole or gully joining with a short Rocker pipe in accordance with table below :-

Pipe Diameter	Length
150 - 600	600
600 - 750	1000
Over 750	1250

4. Where the depth of cover to pipes is less than 600 the pipes shall have a Class Z concrete bed and surround with sulphate resisting cement.
5. All trenches in roads and paved areas shall be backfilled with Type 1 DOT granular sub-base material.
6. All insitu concrete to be designated mix FND2 to BS 8500-1 unless agreed otherwise.
7. The invert levels at the proposed points of connection to existing public sewers shall be checked before any new drains are constructed. Any variation to the levels shown on the drawing shall be notified to Eastwood & Partners.

REV	DESCRIPTION	SIG	CHK	DATE
A	First Issue.			

TAD ARCHITECTS

KENDRAY HOSPITAL, BARNSLEY
NEW CARPARK

TYPICAL MANHOLE AND PIPE BEDDING DETAILS FOR PRIVATE DRAINAGE

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SCALE WHEN PLOTTED AT A1	DRAWING STATUS
1:25	PRELIMINARY

DRAWN	CHECKED	DATE	DRAWING NUMBER	REV
MW	MRD	08-07-19	43632/012	A